

Remarks

1. Applicant thanks the Examiner for his office action.
2. Claims 1-45 are pending in the application.
3. Regarding the drawings, applicant directs the Office's attention to paragraph 58, where the drawing numeral 50 is referred to as "visually displayed image".
4. Applicant hereby submits corrected drawings with more descriptive labels, to comply with the Examiner's demand.
5. Applicant amended the title of the invention to satisfy the Examiners demand.
6. The Office objected to the specifications because of the informalities regarding the spelling of the words "organizing" and "computerizing". Applicant submits that those issues fall within the right of the applicant to be his own grammarian and lexicographer, and that the spelling is in accordance with the UK spelling practice and not repugnant to its original meaning. However applicant voluntarily amended the specifications and claim language to comply with the Office demand. It should be clearly noted that this amendment does not in any way limits the disclosed subject matter or narrows the scope of the claims. The word "computerising" was not found in the specifications, and applicant respectfully requests that the Office will point out the location of such word, so applicant may examine the specification for any mismatches between the Office version and applicant's version, or for any unintended meaning.
7. In accordance with the Office demands claims 1 and 21 where amended to insert the word "to" between "orthogonal" and "each". Similarly to the argument presented above, this correction does not narrow the scope of the claims, as the original presentation was within applicant's rights to act as his own lexicographer.
8. Claims 1-9, 11-16, 19-29, 31-36 and 39-45 stand rejected under 35 USC §102 as being anticipated by Pooser et al., US Patent 5,812,134.
9. The above claims are directed to an improved user interface and way of structuring and navigating data. Conventionally, in a graphical user interface system for a computer which is used to present nodes which have hierarchical relationships, such nodes are presented in two dimensional tree structures. The present claims are directed to a computer apparatus for displaying such

hierarchical structure having a plurality of levels, in which nodes are represented in three dimensional space arranged with three orthogonal axes, the first of which lies parallel to a plane of the display. The levels of the hierarchical structure are spaced sequentially along the first axis, i.e. parallel to a plane of the display, (in the embodiment shown, the hierarchy is shown spaced along a vertical axis, with the highest levels shown highest.) and the nodes of one such level are represented in arrangements spaced along the second and third axes (i.e. in the embodiment shown, horizontally and perpendicular, - into/out of- the screen direction.) In this type of arrangement, the nodes on one level are spaced with respect to each other along both the second axis and the third axis, such that some nodes are “further away” on the screen as well as spaced across it (from left to right in the illustrated embodiment, however clearly the scope of the claims also extends to an up/down direction in other embodiments.) This type of arrangement, referred to as a “galaxy” type arrangement in the description, allows for sophisticated interrelationships to be built between nodes whilst providing a relatively simple and logical navigation to nodes of interest within the “galaxy”.

10. Pooser et al. describes a so-called “molecular” structure in which nodes are represented in three dimensional relationships, the molecule are divided into 'threads' containing nodes arranged in a natural, linear progression which reflects the structure of the information unit represented by the threads (Col. 3, ll. 25-29). However, in this patent the different levels of the node hierarchy are not represented sequentially along one axis of a three dimensional space. On the contrary, as shown in Fig. 5d and the corresponding explanation in col. 9, ll. 52-62, when multiple hierarchical levels exist, an element of the non-lowest level of hierarchy would correspond to a molecule of the immediately lower level, which is clearly shown separate and different from the arrangement of the levels along the first axis as claimed. This makes it difficult for the interface to include multiple different levels of the hierarchy which are viewable and accessible simultaneously.
11. Inasmuch as the Examiner still considers the Pooser reference relevant and disclosing the claimed arrangement, applicant further points out that the Pooser

patent clearly states that "the nodes are arranged in natural linear progression which reflects the structure of the information unit represented by the thread...) but this is clearly disclosed as being "within a given thread" (Pooser, Col. 3, ll. 26), i.e. the thread, representing a single level. However close reading of the Posser reference shows that each 'thread' may be represented as a single node within another thread of molecule, which are shown and described represented as a separate entity on the display (Fig's 4&5, and corresponding col. 9 ll. 50 – 63). As the Pooser patent discloses an arrangement of a linear progression of the nodes within the thread and each thread is shown only separate from the parent thread, Pooser fails to disclose the claimed limitation of claim 1 that requires the location of the nodes of one level to be presented along the first axis. While clearly the present invention may be beneficially used with threads having nodes arranged in linear progression, and extends to such use, Pooser does not teach the claimed limitation.

12. Therefore, applicant respectfully submits that as the Pooser reference failed to disclose the claimed limitation of having the levels sequentially spaced along the first axis, and therefore that the rejection of the above claims is improper. Reconsideration and withdrawal of the rejection is therefore respectfully solicited..
13. Claims 10 and 30 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Pooser et al. U.S. Patent 5,812,134 in view of Roberge et al. U.S. Patent 6,154, 750 and Levin et al. U.S. Patent 6,434, 556.
14. Claims 10 and 30 both contain the limitation requiring the arrangement of the levels along the first axis, shown to be lacking in the Pooser reference, and therefore applicant respectfully traverses the Office position that Pooser teaches all the claim limitations except for the one attributed to Roberge et al or Levin et al. Furthermore, applicant points out firstly that the while claims 10 and 30 VISUALLY OR AURALLY reflect to properties of the node or its information sources, Neither Roberge et al. nor Levin et al. teach that the visual or aural appearance of the node reflects the properties of the node. Roberge teaches that the nodes are arranged in tuples, with each tuple contains amongst others, the type of the node, e.g. that the node data contains a dose, a number, a file name, and the

like. However this amounts to well known methods of arranging data in data structures, and not to displaying data such that **the appearance** of the displayed node reflects the node properties. Levin et al. teaches a relevance ranking according to based upon a variety of information, but does not teach modifying the appearance of the node according to such ranking. Clearly as the claimed limitation is not found in any of the cited references, applicant respectfully submits that the rejection is improper.

15. Claims 17-18, and 37-38 stand rejected under 35 U.S.C. §103 (a) as being unpatentable over Pooser et al. U.S. patent 5,812,134, in view of Norin U.S. Patent 5,812,773. Claims 17-18 and 37-38 all contain the limitation requiring the arrangement of the levels along the first axis, not disclosed in any of the references, and therefore applicant respectfully submits that the claims are allowable.
16. While the dependent claims are allowable by virtue of the independent claims shown allowable, applicant further presents explanation regarding certain individual claims. Regarding claims 5 and 25, Pooser merely mentions that the database may contain audio information, and therefore by extension an information node could relate to a sound source. However Posser does not teach that the sound generation module produce a sound DEPENDING ON THE LOCATION OF NODES in three dimensional space, i.e. the audio reproduction could be arranged to indicate position three dimensional space as an alternative or a supplement to only depicting its 3D position visually.
17. Relating to claims 6 and 26, while applicant found Pooser relating to links to other data, applicant failed to find any reference to links to application, and/or activation of such application as claimed. Applicant therefore respectfully requests that the Examiner will point to such teaching.
18. Regarding claims 12 and 32, the Office took the position that Fig. 4 in Pooser discloses the same node or information appearing more than once within the three dimensional space. Applicant respectfully disagrees, and claims that Fig. 4 does not indicate the same data node appearing more than once as indicated by the fact that the nodes have been given unique reference numerals, and no number appears

more than once, nor does a single reference numeral relates to more than a single node.

19. Inasmuch as the office still finds the combination Pooser, Roberge, Levin, and Norin relevant to the present claims, applicant further submits the arguments that the combination of the references is improper, as no motivation was found to combine the references. The mere fact that the claimed invention is within the capabilities of one skilled in the art is not sufficient to establish obviousness (see MPEP 2143.01). "Particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, **would have selected these components for combination in the manner claimed**"; *In re Rouffet*, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998) (Emphasis added). When patentability turns on the question of obviousness, the search for and analysis of the prior art includes evidence relevant to the finding of whether there is a teaching, motivation, or suggestion to select and combine the references relied on as evidence of obviousness. See, e.g., *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351-52, 60 USPQ2d 1001, 1008 (Fed. Cir. 2001). Perhaps most clearly, *In re Lee* , 277 F.3d 1338, 61USPQ2d 1430, (Fed. Cir.), dictates that to establish a prima facie case of obviousness, ""The factual inquiry whether to combine references must be thorough and searching." Id. It must be based on **OBJECTIVE** evidence of record (emphasis added). The office did not establish the reasons why, with no knowledge of the claimed invention, the skilled artisan would have selected these components for combination to produce the present invention, and no **OBJECTIVE** evidence was provided to suggest such combination. Therefore, applicant alternatively and complimentary submits that the rejection is improper, and respectfully request that it will be reconsidered and withdrawn.

Applicant has made a good faith effort to address each and every point made by the Examiner, and amended the claims, drawings, and the specifications in order to place the application in condition for allowance. Should the Examiner find any deficiency in this amendment or in the application, or should the Examiner believe for any reason, that a conversation with applicant's agent, or a full fledged telephonic interview, may further the

allowance and issuance of this application, the Examiner is kindly requested to contact Shalom Wertsberger at telephone (207) 799-9733.

In light of the showing and all other reasons stated above, applicant believes that the rejections and objections presented by the Examiner in the office action mailed to applicant January 30, 2004 were overcome. Applicant therefore submits that the claims as amended are in condition for allowance. Reconsideration and withdrawal of the rejection and issue of a notice of allowance on all pending claims is respectfully solicited.

Respectfully submitted



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